RFP의 COMMAND LINE INTERFACE CONTROL

(ADDITIVE CHECKSUM / ADDRESS OFFSET)

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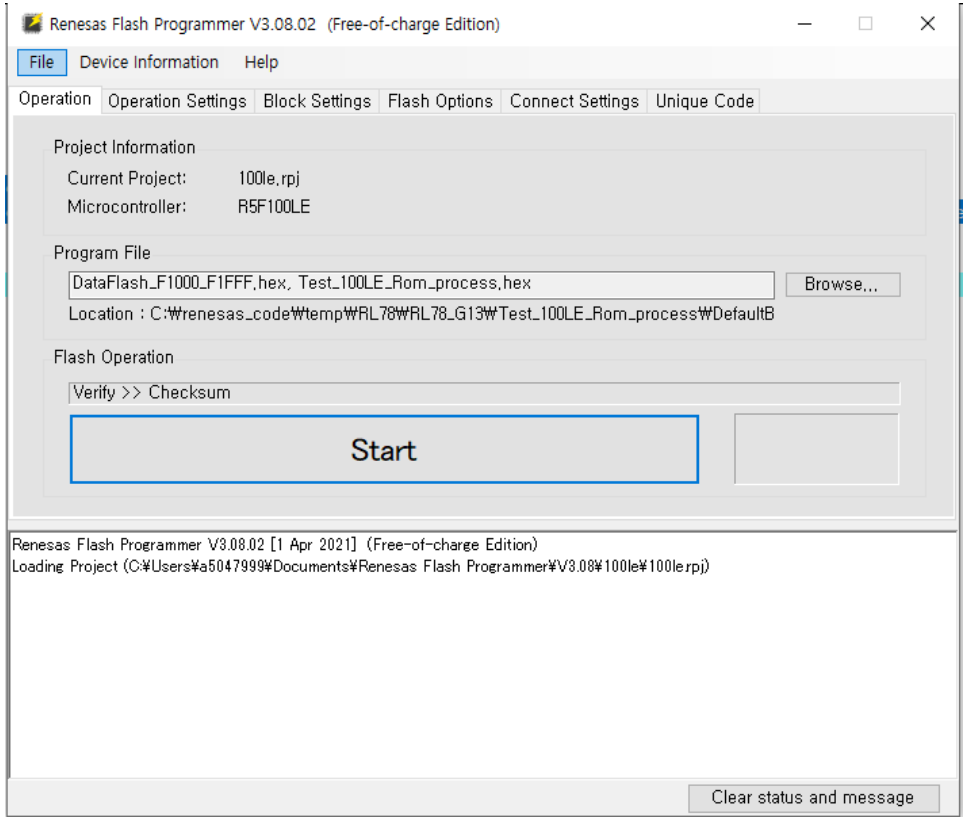
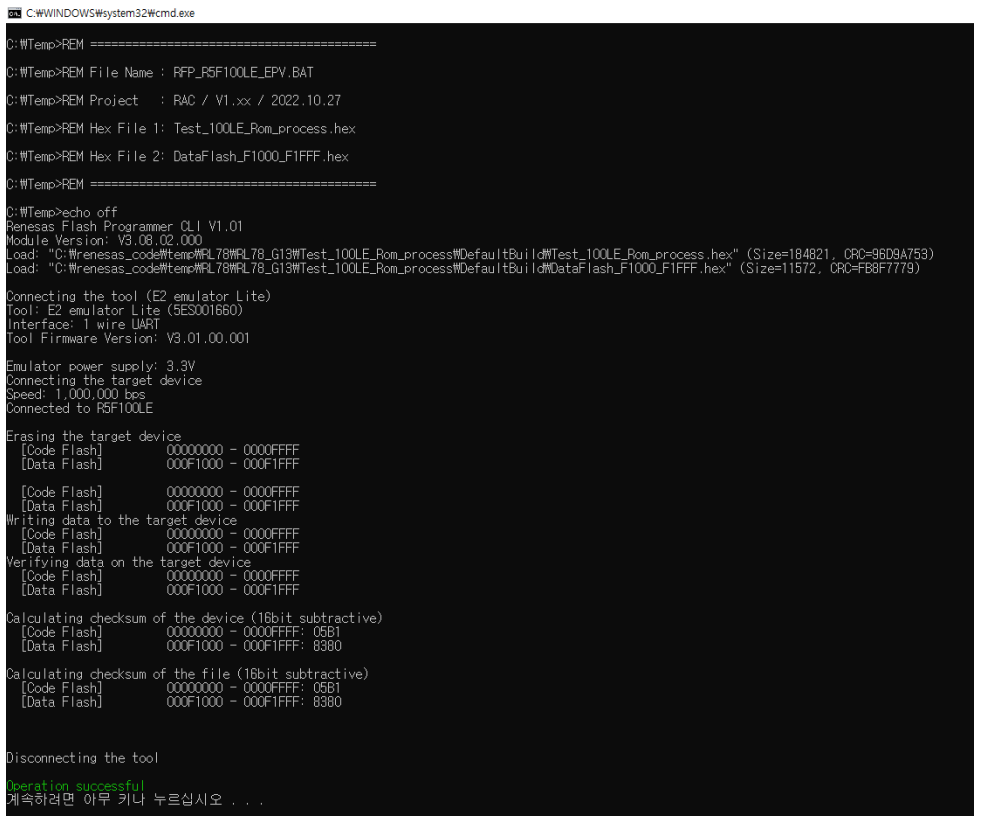
RFP의 활용

Command line control이란, RFP GUI로 구현 할 수 없는 확장 기능 등을 Batch file을 이용하여 실행.
Batch file과 Hexa file을 유관부서에 배포 할 경우, 제어 포인트가 적어 User error등의 빈도 수를 낮출 수 있다.

< GUI를 이용한 Flash제어 >



< COMMAND Line interface를 이용한 Flash제어 >



RFP RELEASE SCHEDULE
TO SUPPORT ADDITIVE CHECKSUM / ADDRESS OFFSET

Schedule		Additive checksum	Address offset
15th March	Alpha version	GUI mode / CLI mode	CLI mode only
Begin of Apr	Official Release	GUI mode / CLI mode	CLI mode only
4Q/2023(Oct)	Official Release	GUI mode / CLI mode	GUI mode / CLI mode

RL78 BATCH FILE 예 및 COMMAND OPTION

< COMMAND Line을 이용한 Flash제어 >

```
REM ====================================================
REM File Name           : RFP_CLI_Batch_forRL78G14_R5F100PJ.BAT
REM Project             : RAC / V1.xx / 2023.03.16
REM ROM Hex File        : 104PJ_Test.hex
REM EEPROM bin File : DataFlash_binary4KB.bin
REM Offset of EEPROM: 0xf1000
REM ====================================================
echo off
rfp-cli -d rl78 -t e2l -vo 3.3 -pv -checksum-type add16
-cf -c -range 00000,3ffff -range f1000,f1fff "C:\renesas_doc\RFP_Cmd_line_forLGE_20230316\RFP E3.11.02b\HexForRL78G14\104PJ_Test.hex"
-bin F1000 "C:\renesas_doc\RFP_Cmd_line_forLGE_20230316\RFP E3.11.02b\HexForRL78G14\DataFlash_binary4KB.bin"

PAUSE
Exit
```

< COMMAND Option >

Rfp-cli [Option field] [download file]

[Option field]

- -d rl78 : Selects a device type.
- -t e2l : Selects the emulator hardware
- -vo 3.3 : Enables the supply of power.
- -checksum-type add16 : additive checksum(Support only for RL78)
- -a : Auto(EPV) -e : Erase / -p : Program / -v : Verify / -blankcheck / -cf : file checksum / -c : device checksum / -pv : Program + Verify

[download file]

- “Path\xxx.hex”

RX66T BATCH FILE 예 및 COMMAND OPTION

< COMMAND Line을 이용한 Flash제어 >

```
REM ====================================================
REM File Name          : RFP_CLI_Batch_forRX66T_R5F566TEADFP.BAT
REM Project            : SAC / V1.xx / 2023.03.16
REM ROM Hex File       : RX66T_MRSSK2_SPM_LESS_FOC_CSP_RV110.mot
REM EEPROM bin File : DataFlash_binary64B.bin
REM Offset of EEPROM: 0x100000
REM ====================================================
echo off
rfp-cli -d rx66x -t e2l -vo 3.3 -pv -fill data -cf -c
"C:\renesas_doc\RFP_Cmd_line_forLGE_20230316\RFP E3.11.02b\HexForRX66T\RX66T_MRSSK2_SPM_LESS_FOC_CSP_RV110.mot"
-bin 100000 "C:\renesas_doc\RFP_Cmd_line_forLGE_20230316\RFP E3.11.02b\HexForRX66T\DataFlash_binary64B.bin"

PAUSE
Exit
```

< COMMAND Option >

```
Rfp-cli [Option field] [download file]
[Option field]
  -d rx66x : Selects a device type.
  -t e2l   : Selects the emulator hardware
  -vo 3.3  : Enables the supply of power.
  -a : Auto(EPV) -e : Erase / -p : Program / -v : Verify / -blankcheck / -cf : file checksum / -c : device checksum / -pv : Program + Verify / -fill data
[download file]
  “Path\xxx.hex”
```

BATCH FILE 실행

1개의 Batch file 실행으로 Code Flash와 Data Flash의 Erase/Program/Verify 실행 및 File checksum과 Device checksum을 확인

C:₩WINDOWS₩system32₩cmd.exe

```
C:₩renesas_doc₩PT_자료(JCKIM)₩2023₩RFP_Cmd_line_forLGE_20230316₩RFP E3.11.02b>REM ========================================================

C:₩renesas_doc₩PT_자료(JCKIM)₩2023₩RFP_Cmd_line_forLGE_20230316₩RFP E3.11.02b>REM File Name       : RFP_CLI_Batch_forRL78G14_R5F100PJ.BAT

C:₩renesas_doc₩PT_자료(JCKIM)₩2023₩RFP_Cmd_line_forLGE_20230316₩RFP E3.11.02b>REM Project         : RAC / V1.xx / 2023.03.16

C:₩renesas_doc₩PT_자료(JCKIM)₩2023₩RFP_Cmd_line_forLGE_20230316₩RFP E3.11.02b>REM ROM Hex File    : 104PJ_Test.hex

C:₩renesas_doc₩PT_자료(JCKIM)₩2023₩RFP_Cmd_line_forLGE_20230316₩RFP E3.11.02b>REM EEPROM bin File : DataFlash_binary4KB.bin

C:₩renesas_doc₩PT_자료(JCKIM)₩2023₩RFP_Cmd_line_forLGE_20230316₩RFP E3.11.02b>REM Offset of EEPROM: 0xf1000

C:₩renesas_doc₩PT_자료(JCKIM)₩2023₩RFP_Cmd_line_forLGE_20230316₩RFP E3.11.02b>REM ========================================================

C:₩renesas_doc₩PT_자료(JCKIM)₩2023₩RFP_Cmd_line_forLGE_20230316₩RFP E3.11.02b>echo off
Renesas Flash Programmer CLI V1.06
Module Version: V3.11.02.000
Load: "C:₩renesas_doc₩PT_자료(JCKIM)₩2023₩RFP_Cmd_line_forLGE_20230316₩RFP E3.11.02b₩HexForRL78G14₩104PJ_Test.hex" (Size=737802, CRC=526219FB)
Load: "C:₩renesas_doc₩PT_자료(JCKIM)₩2023₩RFP_Cmd_line_forLGE_20230316₩RFP E3.11.02b₩HexForRL78G14₩DataFlash_binary4KB.bin" (Offset=000F1000)

Connecting the tool (E2 emulator Lite)
Tool: E2 emulator Lite (5ESO04428)
Interface: 1 wire UART
Tool Firmware Version: V3.03.00.005

Emulator power supply: 3.3V
Connecting the target device
Speed: 1,000,000 bps
Connected to R5F104PJ

Erasing the target device
  [Code Flash]         00000000 - 0003FFFF
  [Data Flash]         000F1000 - 000F1FFF
Writing data to the target device
  [Code Flash]         00000000 - 0003FFFF
  [Data Flash]         000F1000 - 000F1FFF
Verifying data on the target device
  [Code Flash]         00000000 - 0003FFFF
  [Data Flash]         000F1000 - 000F1FFF
Calculating checksum of the device
  [Code Flash]         00000000 - 0003FFFF
  [Data Flash]         000F1000 - 000F1FFF

  16bit Additive checksum result:
  Device checksum:
  [Code Flash]         00000000 - 0003FFFF: D2D3
  [Data Flash]         000F1000 - 000F1FFF: 7C80
  File checksum:
  [Code Flash]         00000000 - 0003FFFF: D2D3
  [Data Flash]         000F1000 - 000F1FFF: 7C80


Disconnecting the tool

Operation successful
계속하려면 아무 키나 누르십시오 . . .
```

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